

The example of **PanAfGeo** project (EGS - OAGS) partnership

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(on the basis of materials
prepared by PanAfGeo team)



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Timimoun, Algeria 19th October 2016



Genesis

Discuss at various forums

- ‘Urgent needs to understand minerals resource potential in Africa and its sustainable development ‘
- ‘Geological knowledge and information should be increase by strengthening Geological Surveys capacity and geological cooperation’

- OAGS/EGS workshop on the role of EGS in assisting OAGS and its member to increase geosciences knowledge for the benefit of African countries





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Geoscientific Knowledge
and Skills in African
Geological Surveys

Feasibility study



- Analysis of Geoscientific knowledge and skills in African Geological Surveys
- PanAfGeo, a project that takes care to requests from
 - EU
 - Considering Africa as one: overcoming the fragmentation of instruments (EDF, DCI, ENI)
 - Issues of cross-regional, continental and global nature
 - Mutual interest initiatives and innovative areas
 - OAGS
 - Transfer of standard practices
 - Quality of trainers
 - Applicability of knowledge
 - Quality of materials (e.g. manuals, guidelines)
 - Fulfilment of expectations
 - Case studies on pilot areas in Africa

What is it?

- An EU African initiative to improve African Geological Surveys expertise
- Focus on establishing a long term strategic cooperation between
 - European and African Geological Surveys
 - EGS and OAGS
- Topics:
 - Geoscientific mapping
 - Mineral Resources assessment, small-scale mining
 - Environmental management of resources
 - Geohazards
 - Geoheritage
 - Information technologies



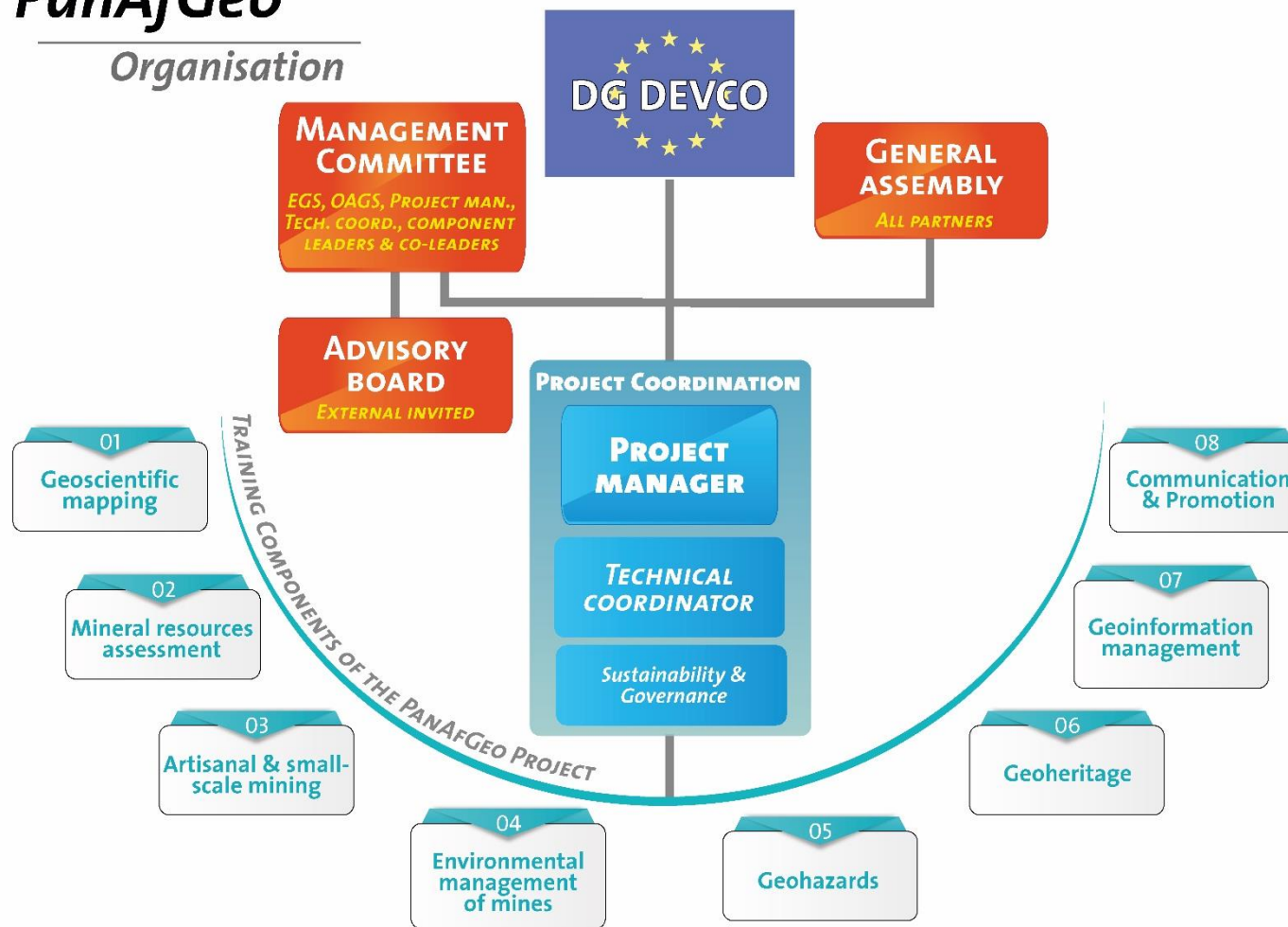
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Global organisation

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Organisation





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The partners

Work-package	European leader	African co-leader	African deputy co-leader
Coordination	BRGM Jean-Claude Guillaneau	OAGS	
1- Geoscientific mapping	CzGS (Czech Republic) Vladislav Rapprich	GSE (Ethiopia)	GSD (Malawi)
2- Mineral resources assessment	GTK (Finland) Riitta Teerilahti	NGSA (Nigeria)	GSN (Namibia)
3- Artisanal and small-scale mining	GEUS (Denmark) John Tychsen	GSD (Ghana)	Central African Republic
4- Environmental management of mines	SGU (Sweden) Berndt Pettersson Mats Thörnelöf	DGS (Botswana)	MMI-DMG (Senegal)
5- Geohazards	LGT (Lithuania) Jonas Satkūnas Jolanta Čyžienė	CGS (South Africa)	Cameroon
6- Geoheritage	IGME (Spain) Enrique Díaz Martínez	MME (Chad)	Morocco
7- Geoscience information management	BRGM (France) Marc Urvois	BUMIGEB (Burkina Faso)	MERN (Djibouti)
8- Communication and dissemination	EGS Claudia Delfini	OAGS Secretariat	

How it will work?

- Targeted thematic trainings
- All African countries targeting some equilibrium between regions and languages
- Linked to key networks and partners who can both contribute to and participate in aspects of training such as UNESCO, GS Af, WB, EDF, GIRAF, etc
- PanAfGeo will leverage existing knowledge and add to existing initiatives

Where are we?

- The supports of African Union commission and European Union commission are evident
- OAGS and EGS are actively engaged in the project
- The African and European partners are ready to start
- The DoA, Document of Action, is validated
- The contract is under finalisation



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Preliminary planning of the trainings



Geological mapping and map compilation is step by step process

Preparation work

Field work

Interpretation of data

Compilation of map



Mineral Resources

Long Term Objectives

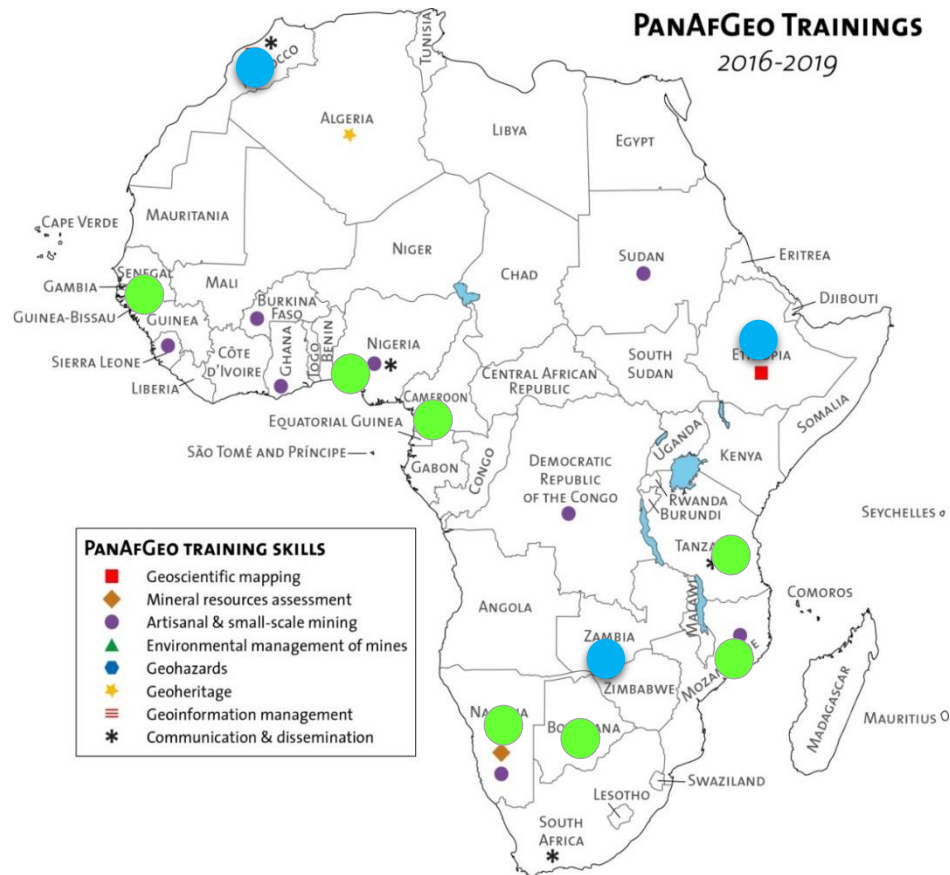
- Increase knowledge and understanding in the African geological surveys of sustainable use and management of mineral resources
- Develop skills of the staff in modern data processing methods and compiling of thematic maps of mineral resources
- Build capacity of the geological surveys to use their expertise and data to contribute to decision-making and good governance of mineral resources.
- Improve promotion and marketing of minerals and mineral potential (e.g. to foreign investors)
- Add knowledge and understanding of the international mining sector



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Tentative Training locations



- Western / French: Dakar (Senegal)
- Western / English: Abuja (Nigeria)
- Central Africa / French: Yaoundé (Cameroon)
- Eastern / English: Dar Es Salaam (Tanzania)
- Southern / Portuguese: Maputo (Mozambique)
- Southern / English: Windhoek (Namibia)
- Southern / English: *Gaborone (Botswana)*

● *Additional possibilities: Addis Ababa (Ethiopia), Lusaka (Zambia), Rabat (Morocco)*

Why is the ASM sector important ?



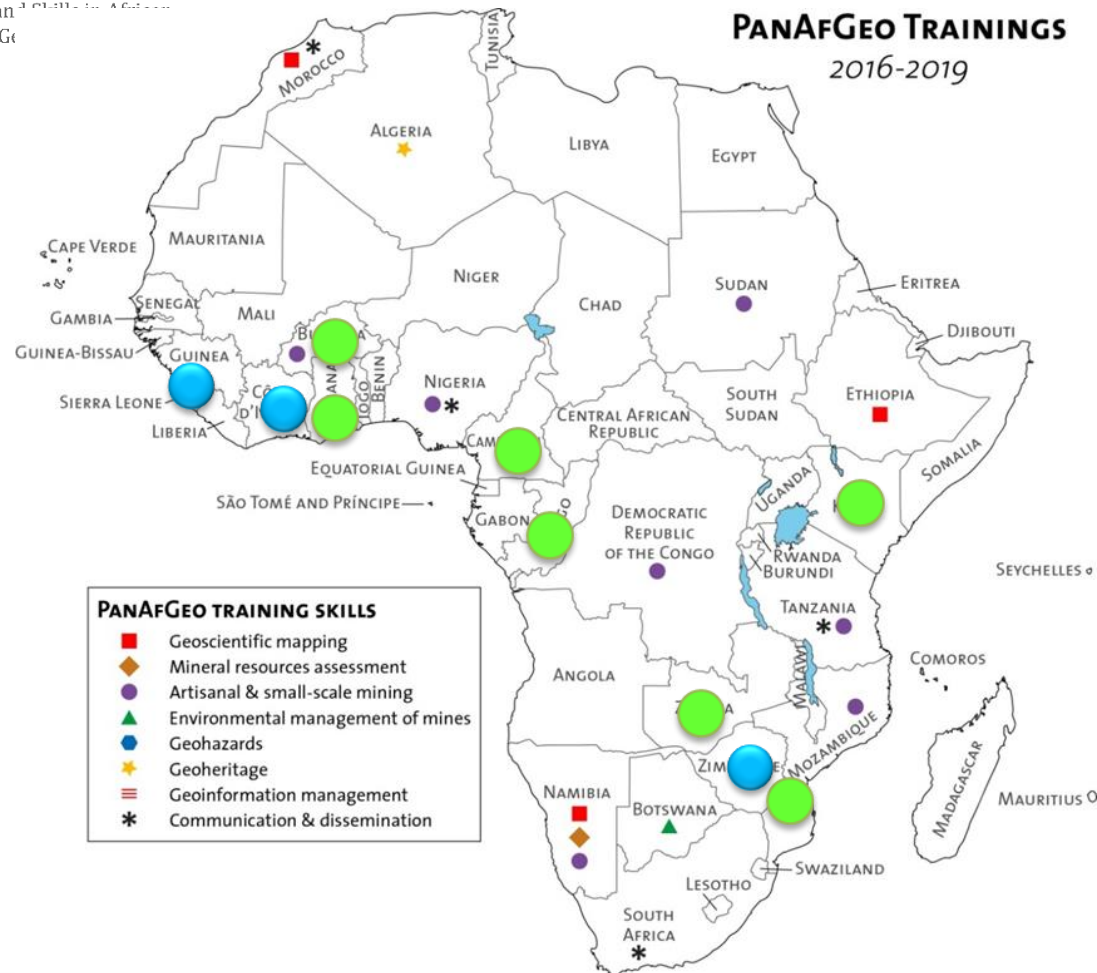
- Estimates of numbers engaged in the ASM sector vary. The best estimate for **Africa is 6-7 million** men, women and children and 35-50 million dependent on this sector for their livelihood.
- Growth in ASM numbers is expected to continue in line with **increase in population and limitations in new job opportunities.**
- People dependent on ASM for their livelihood are **highly vulnerable**. Life is difficult for the vast majority of people engaged in the ASM sector.
- ASM exists in many diverse settings and forms and, as such, is a complex sector marked by a shifting set of problems for which a **one-size-fits-all approach** is clearly not the answer.



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Geoscientific Knowledge
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TENTATIVE TRAINING LOCATIONS



- Western / French: Ouagadougou (Burkina Faso)
- Western / English: Accra (Ghana)
- Central Africa / French: Yaoundé (Cameroon), Brazzaville (Congo)
- Eastern / English: Nairobi (Kenya),
- Southern / Portuguese: Maputo (Mozambique)
- Southern / English: Lusaka (Zambia)
- Additional possibilities:
Harare (Zimbabwe),
Freetown (Sierra Leone),
Abidjan (Cote D'ivoire)

Environmental management of mines



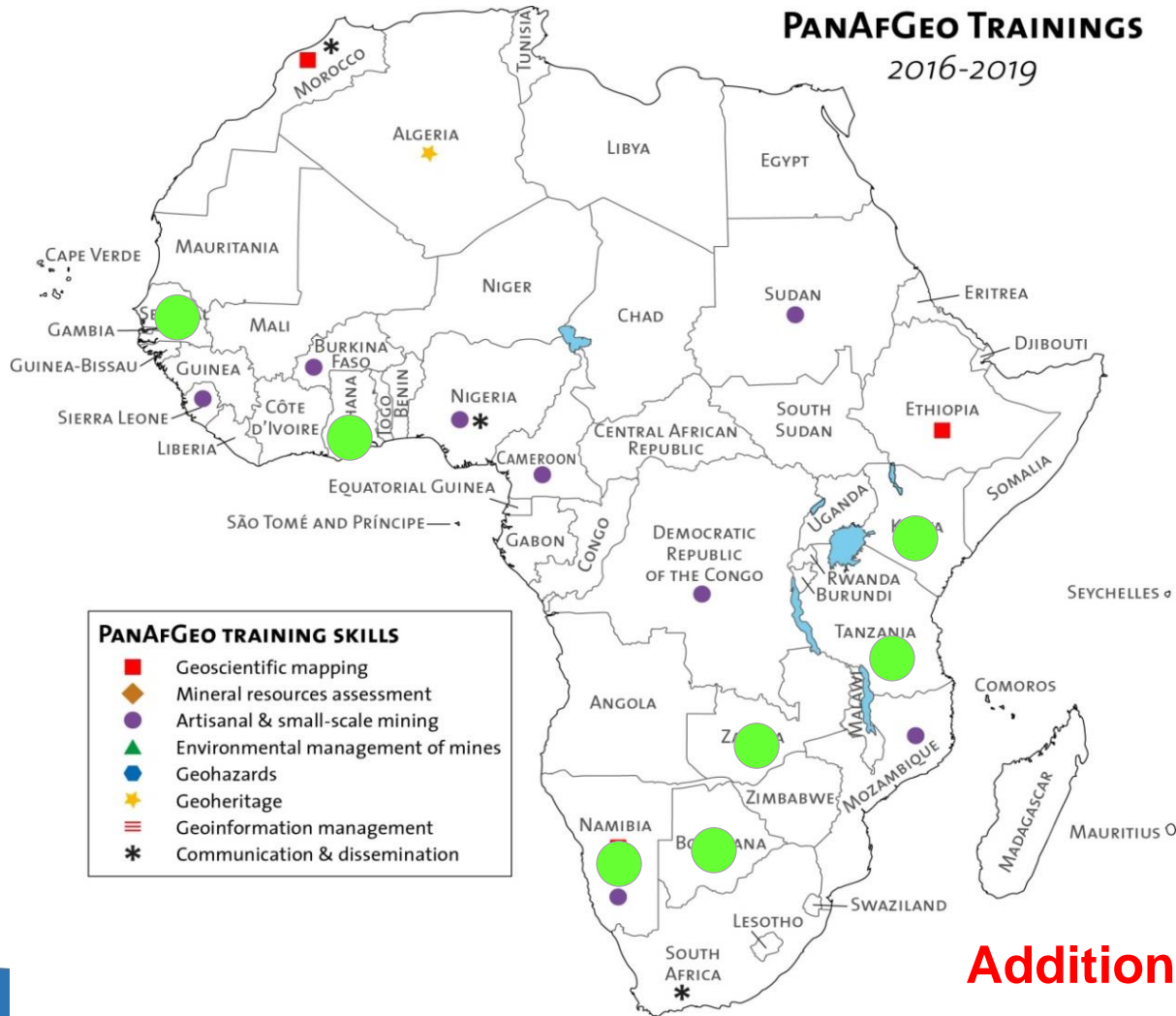
Long Term Objective:

- Management of environmental problems related to mining by using geosciences to understand, predict and prevent environmental impacts caused by mining activities
- Increase the capacity to apply geochemical mapping for environmental assessments
- Build capacity in subjects such as hydrogeology, mine water geochemistry and mine waste management
- Strengthen the cooperation with responsible environmental and mining authorities
- Assist responsible authorities in improving the quality of Environmental Impact Assessments and Management Plans.



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Tentative Training locations



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Additional training also possible in portuguese

Africa is impacted by a multitude of natural and technogenic hazards and disasters such as:

- drought / soil erosion / desertification,
- flooding,
- landsliding,
- volcanic activity,
- earthquakes,
- mining activity,
- waste disposal.



Concept of Geohazards training courses

Four training courses will be organized during realization of the 3-year PanAfGeo project.

Training in geohazards will be performed by **LGT, ISPRA, GeoZS** and **PGI–NRI**.

Two of them will be devoted to natural geohazards:

- seismicity / volcanics / active tectonics / tsunami – **ISPRA**
- landslides / subsidence / floods / desertification – **LGT, ISPRA, PGI–NRI and GeoZS**

The other two will be devoted to human induced geohazards:

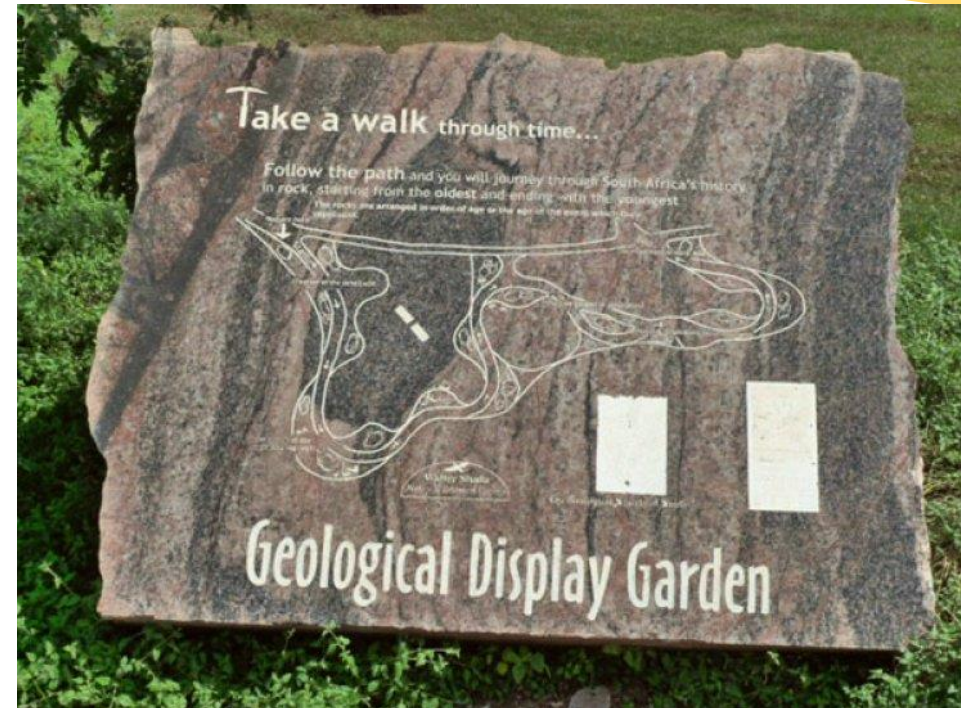
Impact of mining / remote sensing / geochemistry / monitoring methods – **LGT, PGI–NRI**

Training locations: South Africa, Zambia, Tanzania, Ethiopia

Geoheritage research in African GSOs

The most important needs identified by GSOs were:

- Training on geosite inventory (including mapping and value assessment), and
- Training on geosite management (including planning, restoration, and public use).
- Training locations: South Africa, Tanzania, Algeria



*Geological garden at the Walter Sisulu National Botanical Garden, Johannesburg, SA
(Photograph by S. Grab)*

Geoscience information management

- **Long Term Objectives:** Geological knowledge management and dissemination of public information through national nodes within a pan-African network and a geological and mineral information system to support activities developed by a wide panel of national and regional stakeholders.
- **Work Package Objective:** Strengthen geoscience information management skilled professionals at operational level in the respective African GSOs, with adaptation to the local context in terms of existing equipment, infrastructure and personnel as well as sustainability potential

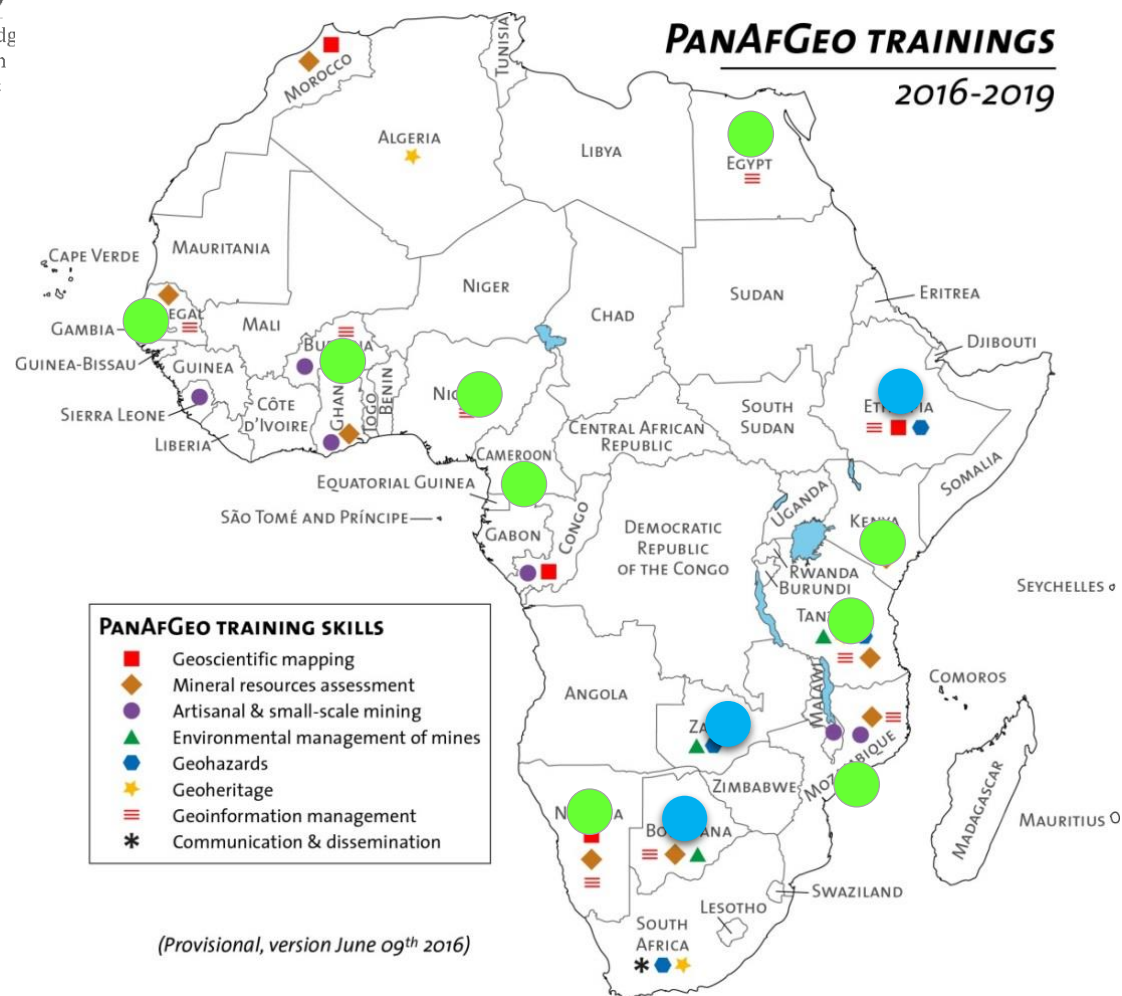




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Training locations



- **Northern** / English: Cairo (Egypt)
- **Western** / French: Dakar (Senegal), Ouagadougou (Burkina Faso)
- **Western** / English: Abuja (Nigeria)
- **Central Africa** / French: Yaoundé (Cameroon)
- **Eastern** / English: Dar Es Salaam (Tanzania), Nairobi (Kenya)
- **Southern** / Portuguese: Maputo (Mozambique)
- **Southern** / English: Windhoek (Namibia)
- **Additional possibilities:**
Addis Ababa (Ethiopia),
Gaborone (Botswana),
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Thanks for your attention Merci
pour votre attention
Obrigado por sua atenção

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